

D<sub>3</sub>  
Concl. another of said second connector members has a pair of coupling holes coupled with said pair of connecting pins and a position-controlling-means coupling portion coupled with said position-controlling means of said first connector member for matching said polarities.

---

D<sub>4</sub> --22. (Twice Amended) The multi-channel audio system according to Claim 16, wherein one of said first connector members is secured to each end of each of said plurality of connecting cable members and one of said second connector members is secured to each of said plurality of speaker terminals, wherein said first connector members on each connecting cable member are the same color.

---

#### REMARKS

Claims 5, 12, 16, and 22 remain in the application and have been amended hereby with claims 7-10, 14, 17-20, and 24 having been cancelled, without prejudice or disclaimer.

Reconsideration is respectfully requested of the rejection of claims 5, 7-10 and 14 under 35 USC 103, as being unpatentable over Gefvart in view of Ruzicka, Siems et al., and Glover.

Claims 7-10 and 14 have been cancelled hereby, thereby rendering moot the rejection thereof.

As previously noted, the present invention is intended to

provide a system for facilitating the connection of multiple loudspeakers to an amplifier using cables typically employed to hard wire the speakers to the amplifier. As noted, in the past problems came up with having such a large number of speakers and output terminals in that not only were short circuits commonplace, but the speakers were connected to the wrong output terminals. The present invention provides a color coding system as well as a polarity determination system, so that not only are the correct speakers are connected to the correct output terminals of the amplifier but the polarities are maintained in order to provide proper phasing of the output signals. The present invention provides a plurality of colored labels applied to the speakers and an plurality of colored sheets affixed to the output terminal, of the amplifiers as well as the fact that the plugs on the cables are also provided with different colors. The color distributions for the speakers, the output terminals, and the cables are all the same. Thus, the connection of the speakers to the amplifier output terminals is facilitated.

Claims 5 and 16 have been amended hereby to emphasize the above-noted features of the present invention.

Gefvart relates to a multiple loudspeaker system of the kind that would benefit from practicing the teachings of the present invention.

Ruzicka is cited for a showing of the use of a plurality of colors for enabling a plurality of channels to be discernable. As will be noted hereinafter, however, Ruzicka does not follow this approach and teaches the avoidance thereof.

Siems et al. is cited for a showing of the use of color coding to identify electrical connectors and also for the use of heat shrink plastic markers to be attached to the connecting wires.

Glover is cited for showing a connector having an orientation feature so that polarities are maintained and also for providing pins in the connector body.

The arguments for patentability set forth in the amendment filed November 27, 2002 relating to the fact that the invention must be considered as a whole and not on a piece-meal basis are reiterated hereby.

Moreover, it is respectfully submitted that not only is there no suggestion in any reference of benefits to be had by combining the selected features, as proposed by the examiner, but also the references actually lead one away from making these changes to the system by adding the color coding, shrink wrap elements, and the like. For example, in Ruzicka it is stated that it is known to use color coding of the connections at the speaker and the audio signal source as well as adding labeling to the jacks. However, Ruzicka goes on to say that

these measures have failed to provide the consumer with a sufficiently easy way to install a home theatre sound system correctly. Therefore, whatever Ruzicka goes on to disclose is what should be the basic teaching of Ruzicka and not the offhand statement not to use color coding.

In addition, although in Siems et al. shrink wrap tubes are provided Siems et al. does not use color coded shrink wrap tubes and instead uses the shrink wrap labels having a complicated coding procedure bearing alpha-numeric indicia on the shrink wrap tubes. Therefore, one reading Siems et al. would not use color coded shrink wrap tubes.

Furthermore, the present invention, as recited in the presently amended claims, provides that the actual plugs on the cables also be color coded. This color coding of the plugs has the same color distribution as the labels applied to the speakers and the color sheets applied to the output terminals.

Therefore, it is respectfully submitted that even assuming that all of the elements of the present invention can be found in these four references it is respectfully submitted that no teaching or suggestion is provided to make the combination as set forth in amended claim 5.

Reconsideration is respectfully requested of the rejection of claim 12 under 35 USC 103, as being unpatentable

over Gefvart, Ruzicka, and Siems et al. and further in view of Glover and Lee.

Lee is cited as showing a connecting system in which RCA plugs are provided at each end of a multiple conductor cable and having a color coded band so that the respective ends can be connected correctly.

Claim 12 depends from claim 5 which for the reasons set forth hereinabove is thought to be patentably distinct over the cited references and for, at least those very same reasons, claim 12 is also submitted to be patentably distinct thereover.

Reconsideration is respectfully requested of the rejection of claims 16, 17, 20, and 24 under 35 USC 103, as being unpatentable over Ruzicka in view of Siems et al. and Glover.

Claims 17, 20, and 24 have been cancelled hereby.

Claim 16 as amended hereby is similar in scope to claim 5 as discussed hereinabove. Specifically, the provision of colored labels on the speakers along with colored sheets on the output terminals and colored shrink wrap tubing on the cables in which the color distribution is the same for all elements is now positively set forth in claim 16.

As discussed hereinabove, it is respectfully submitted that that both Ruzicka and Siems et al. teach away from the features of the present invention relating to providing the

colors and providing the colors by way of a shrink contractile tubing. For those reasons, it is submitted that claim 16 is also patentably distinct over these references.

Claims 18 and 19 have been cancelled hereby thereby rendering moot the rejection thereof.

Reconsideration is respectfully requested of the rejection of claim 22 under 35 USC 103, as being unpatentable over Ruzicka, Siems et al. and Glover, and further in view of Lee.

Claim 22 depends from claim 16 which for the reasons set forth above is thought to be patentably distinct over the cited references and, for at least those very same reasons, claim 22 is also submitted to be patentably distinct thereover.

In response to the "response to arguments" in the instant official action, applicants respectfully point out that the examiner's contention that "each reference presents its own teaching of the various advantages provided by the structures shown..." is not exactly a correct characterization of these references. Siems et al. teaches that the color coded shrink wrap is not an approach that is useful. Ruzicka completely teaches away from using color coding by saying for many reasons these color coding measures have failed to provide the consumer with the sufficiently easy way to install a home

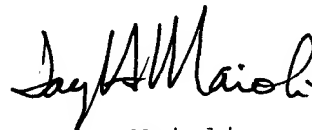
theatre sound system correctly. Thus, Ruzicka does not lead one with ordinary skill in the art to employ the color coded approach of the present invention. In fact, Ruzicka says don't do it.

Accordingly, by reason of the amendments made to the claims hereby, as well as the above remarks, it is respectfully submitted that a multi-channel audio system as taught by the present invention and as recited in the amended claims is neither shown nor suggested in the cited references, alone or in combination.

Favorable reconsideration is earnestly solicited.

Respectfully submitted,

COOPER & DUNHAM LLP



Jay H. Maioli  
Reg. No. 27, 213

JHM:gr

VERSION WITH MARKINGS TO SHOW CHANGES MADEIN THE CLAIMS

Please amend claims 5, 12, 16 and 22 by rewriting same to read as follows and cancel claims 7-10, 14, 17-20, and 24, without prejudice or disclaimer.

--5. (Four Times Amended) A multi-channel audio system comprising:

an electronic apparatus provided with at least four audio signal output terminals for a plurality of channels;

a plurality of speakers for generating acoustic output for each of said plurality of channels in a form of audio signals output from said audio signal output terminals, wherein a plurality of colored labels are attached respectively to rear surfaces of said plurality of speakers, and wherein each colored label has a different respective color; and

a plurality of connecting cable members, each of said plurality of connecting cable members incorporating a pair of conductor members bearing a pair of polarities and sheathed by one of a plurality of insulating sheathing members for connecting said electronic apparatus to said plurality of speakers, wherein



each of said audio signal output terminals is arranged corresponding to positions of said plurality of speakers, wherein a plurality of colored sheets are affixed adjacent thereto, said plurality of speakers being arranged corresponding to said plurality of channels, wherein

each of said audio signal output terminals is distinguished by one of a plurality of different respective colors corresponding to a color distribution of said plurality of colored sheets for enabling each of said plurality of channels to be discernible; and

each of said plurality of connecting cable members is distinguished by one of said plurality of colors corresponding to a color distribution of said colored sheets affixed adjacent said audio signal output terminals and said plurality of colored labels, and wherein

said distinction of each of said plurality of connecting cable members is implemented by a plurality of thermally contractile tubes each bearing a different color secured to each of said plurality of connecting cable members, and wherein

one end of said connecting cable member has a plug connector structure fitted with said pair of conductor members in the form of a pair of coupling holes respectively connected to two conductor portions, wherein each said plug connector structure has a different respective color corresponding to

the color distribution of said plurality of colored labels and said plurality of colored sheets;

said audio signal output terminals conform to a socket connector structure coupled with said plug connector member;

said socket connector has a pair of connecting pins bearing a pair of polarities and position-controlling means for matching said polarities when an other of said plug connectors is coupled with said socket connector;

wherein said pair of coupling holes are to be coupled with said two connecting pins and said plug connector includes a position-controlling means coupling portion to be coupled with said position-controlling means of said socket connector for matching said polarities[; and

said color for distinguishing said individual connecting cable members corresponds to a color provided for said plug connector].

--12. (Thrice Amended) The multi-channel audio system according to claim 5, wherein one of said plug connector [member] members is secured to [both ends] each end of each of said plurality of connecting cable members and one of said socket [connector] connectors is secured to each of said plurality of speaker terminals, wherein said plug connector members on each connecting cable member are the same color.

--16. (Four Times Amended) A multi-channel audio system comprising:

an electronic apparatus having a plurality of audio signal output terminals compatible with at least four of a plurality of channels;

a plurality of speakers for generating acoustic output for each of said plurality of channels in the form of an audio signal output from each of said plurality of audio signal output terminals, wherein a plurality of colored labels are attached respectively to rear surfaces of said plurality of speakers, and wherein each colored label has a different respective color; and

a plurality of connecting cable members each having a pair of conductor members bearing a pair of polarities, and each of said plurality of connecting cable members are individually sheathed with an insulating sheathing member and are used for connecting said electronic apparatus and said plurality of speakers, wherein

said audio signal output terminals corresponding to said plurality of channels provided for said electronic apparatus are individually distinguished by [associating each of said plurality of channels with a color] a plurality of different colored sheets affixed respectively adjacent said audio signal output terminals to visually discern individual channels,

wherein a color distribution of said colored sheets corresponds to a color distribution of said colored labels;  
and

said plurality of connecting cable members is provided with [a] specific [color] different colors corresponding to a color distribution of said colors of said plurality of colored sheets provided for [each of] said plurality of audio signal output terminals for visual discernment of individual channels and corresponding to a color distribution of said plurality of colored labels affixed to said plurality of speakers, wherein

said distinguishing of each of said plurality of connecting cable members is performed using a plurality of thermally contractile tubes each bearing a different color and secured to each of said plurality of connecting cable members, wherein

one end of each of said plurality of connecting cable members has a first connector structure fitted with a pair of connecting pins bearing a pair of polarities each connected to two conductor portions, wherein each said first connector structure has a different respective color corresponding to the color distribution of said plurality of colored labels and said plurality of colored sheets;

each of said plurality of audio signal output terminals conforms to a second connector structure and is coupled with said first connector member;

said first connector member has position-controlling means for matching said polarities when coupled with an other of said second connector members; and

another of said second connector members has a pair of coupling holes coupled with said pair of connecting pins and a position-controlling-means coupling portion coupled with said position-controlling means of said first connector member for matching said polarities[; and

said color for distinguishing said individual connecting cable members corresponds to said color provided for said first connector member].

--22. (Twice Amended) The multi-channel audio system according to Claim 16, wherein one of said first connector [member] members is secured to [both ends] each end of each of said plurality of connecting cable members and one of said second connector [member] members is secured to each of said plurality of speaker terminals, wherein said first connector members on each connecting cable member are the same color.